# Proposed Text Revisions for North Coast Basin Ag Plan –EWN/AS Proposed changes (strikeout or blue text) have been made within existing sections of plan.

#### **GOALS AND OBJECTIVES**

The goal of the North Coast Basin AgWQM Area Plan and Area Rules is to reduce undesirable water quality by promoting good land stewardship, identifying incentives with financial and educational support to promote adaptive management, and defining clear enforcement guidelines. Specific goals of the North Coast Basin AgWQM Area Plan include:

- 1. Create a high level of awareness of water quality issues and problems among agricultural operators and the rural public in the North Coast Basin.
- 2. Promote land management that limits the movement of nutrients and bacteria from agricultural and rural lands to state waters.
- 3. Promote land management that stabilizes streambanks.
- 4. Promote land management that reduces sedimentation of streams due to soil erosion.
- 5. Seek to cControl water pollution as close to its source as possible using North Coast Basin TMDL allocations as targets for the agricultural sector as a whole.
- 6. Seek funding sources to implement the North Coast Basin Area Plan.

Objectives deemed necessary to reach these goals include:

- Conduct educational programs to promote public awareness of water quality issues and their solutions.
- 2. Secure necessary resources to administer and implement the water quality program.
- 3. Reduce erosion and sediment delivery from agricultural and rural lands to waters of the state.
- 4. Reduce nutrient and bacteria loading from agricultural and rural lands to waters of the state.
- 5. Avoid waste discharges to waters of the state.
- 6. Limit livestock access to streams, wetlands, and the riparian areas.
- 7. Ensure proper animal waste storage and utilization or disposal.
- 8. Promote streambank stabilization and the restoration and enhancement of wetlands and riparian habitat.

# Water Quality Parameters of Concern

Many waterbodies throughout the North Coast Basin are water quality limited for one or more water quality parameters. Oregon DEQ is required to submit a list of these waterbodies to USEPA every two years under section 303(d) of the Federal Clean Water Act. Parameters of concern in the North Coast Basin are: temperature, bacteria, sedimentation and dissolved oxygen.

In response to these listings, the Oregon Department of Environmental Quality has developed total maximum daily loads (TMDLs) for some of these parameters that apply to the entire North Coast Basin. TMDLs limit the total amount of a pollutant that can be discharged to a waterbody, and allocate the remaining capacity of these pollutants (loading allocations) to various categories of land use. In general, loading allocations for these parameters have been developed for each subbasin. Allocations are generally expressed as percentage reductions from existing conditions required to meet water quality standards. The TMDL allocations have been specifically designed so that when attained, waterbodies of the North Coast Basin will meet water quality standards. The following recommendations may be used as a guide for landowners in meeting the prohibited conditions and TMDL allocations for agriculture.

Stream temperature is affected by shade, channel morphology, groundwater influence, as well as direct discharges from municipal and industrial sources. Allocations designed to meet temperature standards reduce solar radiation, and are expressed as percent effective shade that a given site is capable of providing. Shade at a given location is controlled by many factors acting in concert, including vegetation, channel width, topography, latitude and others physical features. Shade curves have been developed that provide shade targets for streams of various widths and orientations. Small streams (0-20 feet) should be in the range of 90% effective shade or greater. Effective shade targets are as low as 40% on the widest streams owing to the inability of tall trees to shade the entire width.

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Bacteria allocations calling for the reduction of loads from agricultural and other sources have also been established. Target runoff concentrations generally call for reductions of 70-90% relative to current conditions.

There are 3 documents available that describe conditions and pollutant sources, and include allocations of these pollutants (temperature, sedimentation, and bacteria) among sources. These documents and TMDLs are:

### **Tillamook Bay Watershed TMDLs**

Temperature and Bacteria Approved by EPA 7/31/2001

## **Nestucca Bay Watershed TMDLs**

Temperature, Bacteria and Sedimentation Approved 5/13/2002

# North Coast Subbasins TMDLs (including Nehalem, Necanicum, Lower Columbia-Youngs and Lower Columbia-Clatskanie Subbasins)

Temperature and Bacteria Approved 8/20/2003

These TMDLs cover all areas in the North Coast Basin having listings for temperature, bacteria, and, sedimentation and are available on the DEQ agency website at: http://www.deg.state.or.us/wq/TMDLs/TMDLs.htm.

Remaining listings requiring TMDLs include:

Parameter	Number
	Listings
Lower Columbia – Youngs Subbasin	
Aquatic Weeds	2
Dissolved Oxygen	5
Metals	2
Lower Columbia – Clatskanie Subbasin	
Dissolved Oxygen	2
Biological Criteria	1
Necanicum Subbasin	
Aquatic Weeds	1
Nehalem Subbasin	
	No Listings
Tillamook Subbasin	
Dissolved Oxygen	11
Iron	1



# POLLUTION PREVENTION AND CONTROL MEASURES

The Oregon Department of Environmental Quality (DEQ) has determined that many of the State's waters do not support designated beneficial uses as a result of factors associated with water quality. Once the DEQ has determined that a water body is "water quality limited" as required by the federal Clean Water Act section 303(d), it is placed on the "303(d) list." DEQ has developed Total Maximum Daily Loads (TMDLs) for temperature, bacteria, and sedimentation for North Coast subbasins that had listings for these parameters (see Water Quality Parameters of Concern). For each water body on the list, the DEQ develops a Total Maximum Daily Load (TMDL) for the pollutant(s) that limit the beneficial use. Plans to meet Total Maximum Daily Load —or-(TMDL) – allocations are required for industry, municipalities, forestry, and agriculture to improve water quality so that all beneficial uses are supported. The North Coast Basin AWQMAP is designed to meet TMDL allocations.

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